

Application/Control Number: 10/812,108
Art Unit: 3683

Docket No.:
BA/Div App

APPLICANTS' RESPONSE TO 07/07/04 NON-FINAL OFFICE ACTION

In the July 7, 2004 Non-Final Office Action ("7/7/04 OA"), the Examiner rejected the pending claims under 35 U.S.C. §102(b) as being anticipated by several U.S. patents. In general, the Examiner found the claims overbroad and anticipated by several specific patents showing cylindrical dampers and by other, unspecified "references too numerous to mention." See 7/7/04 OA, ¶ 9, at p. 3 (emphasis in original). The Examiner suggested that the Applicant "[r]econsider the undue breadth of claim 17". Id.

The Applicant has amended independent claim 17. The dependent claims have been amended appropriately.

Applicant's amendment limits the claim to a vibration damper for an archery bow. This limitation is added to the preamble and an archery bow is added as a discrete element. None of the references cited by the Examiner involve archery bows. The amendment also specifies that the claimed vibration damper is a ring-shaped damper intended to fit over a cylindrical projection of an archery bow. This embodiment is described in the Specification, in which it is noted that the ring-shaped damper can fit over a mechanical damper (43) or a counterweight. See Publication No. 2004/178,550, at ¶ 26. Dependent claim 19 has been amended to clarify that the cylindrical projection can also be a mounting cup. This embodiment is also described in the Specification. Id., at ¶ 27.

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Applicant's amendment clarifies that the fins extend out from the ring-shaped base in a direction radial from an axis along the cylindrical ring-shaped base. This amendment distinguishes the claim from the Richards reference (US Pat. No. 2,727,407), which discloses a member (1) "with a series of projections 3" on upper and lower sides.

Applicant's amendment clarifies that the claimed ring-shaped vibration damper is designed to allow the fins to vibrate freely: "the radial fins are not constrained and are free to vibrate". See Amended claim 1, above. This amendment distinguishes the claimed invention from the references cited, all of which constrain the dampers. Thus, Breed's (US Pat. No. 5,133,393) "star shape" vibration damper (43) is enclosed between a metallic sleeve (16) and a cylindrical chamber (8). See Breed, at Col. 6:38-42 and 8:60-9:2. The "lever member" (5) of Richards is a "flexible pawl" riding between metal plates (20). See Richards, at Col. 1:71-2:4, 2:41-47, and 4:3-16. Tucker (US Pat. No. 6,500,079) discloses an "overlay" (502) for a lacrosse stick (500), intended to provide a tacky gripping surface between the stick and a player's hand. See Tucker, at Col. 10:47-54 and 11:9-18. Thus, the "overlay 502 is a rib" constrained by a player's hand and, therefore, not free to vibrate. Jensen (US Pat. No. 6,247,687) discloses an aircraft landing gear "elastomer element" (48) held between aircraft landing gear suspension

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piston element (46) and the inner cylindrical surface (34) of the damper (20). See Jensen, at Col. 4:12-25. Pierce (US Pat. No. 5,413,374) discloses a busing (212) held between an "inner element" (220) and an "outer element" (118). See Pierce, at Col. 10:3-15 and Fig. 7. Rennie (US Pat. No. 6,231,456) discloses a "vibration damping insert" (10) that fits in the handle of a golf club. Colford (US Pat. No. 5,735,746) discloses a torsional vibration damper with "non-deformable spokes" (3) constrained between an "inside ring" (2) and an "outside ring" (1). See Colford, at 3:2-5. Wilson (US Pat. No. 3,703,290) discloses a "plug" (10) constrained within the barrel portion (4) of a baseball bat.¹ See Wilson, at Col. 3:39-57. In summary, each of the references cited by the Examiner involves a constrained device, whereas the amended claim 17 involves a vibration damper with fins that are left free to vibrate.

Dependent claim 18 adds a "stabilizing ring" element joining the fins. The Examiner rejected this claim based on the Tucker's lacrosse overlay, which includes "latitudinal ribs" (512). See 7/7/04 OA, ¶ 8, at 3; and Tucker, at Col. 11:30. The Applicant has amended claim 18 to clarify that the stabilizing ring is "concentric" to the ring-shaped base and "cylindrical". Thus,

¹ As discussed below, Applicant disagrees with the Examiner's interpretation that Wilson's "outer extremity 44" and "stabilizer portion 42" (see Wilson, at Col. 5:10-14) are "radial fins".

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the claimed "concentric, cylindrical stabilizing ring" is not anticipated by the "latitudinal ribs" of Tucker.

The Examiner also rejected claim 18 based on Colford's torsional vibration damper and Wilson's baseball bat plug. See 7/7/04 OA, ¶¶ 13 and 14, at 4. With respect to Colford, the "intermediate layers" (4) do not form a ring, but, rather, connect the inside ring 2, the spokes 3 and the outside ring 1 to each other. Amended claim 18 clarifies that the "concentric, cylindrical stabilizing ring" is formed in a "middle portion" that "is concentric with the ring-shaped base", whereas the "intermediate layers" (4) of Colford are a mass connecting inner (2) and outer (1) rings as well as the spokes (3). With respect to Wilson, Applicant disagrees with the Examiner's interpretation that Wilson's "outer extremity 44" and "stabilizer portion 42" (see Wilson, at Col. 5:10-14) are "radial fins". See 7/7/04 OA, ¶ 14, at 4. Portions 42 and 44 of Wilson are solid, not finned.

The Examiner rejected dependent claims 19 and 20 based on Tucker. See 7/7/04 OA, ¶ 8, at 3. Claim 19 added a mounting cup disposed within the inner ring surface. Claim 20 depends from claim 19 and adds a foam insert inside the cup. However, the Examiner did not explain what part of Tucker anticipates these claims. The Examiner also cited Pierce and Wilson in rejecting these claims, but similarly failed to identify what parts disclosed in Pierce or Wilson anticipate the claimed mounting cup

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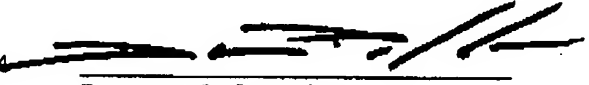
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and foam insert elements. See 7/7/04 OA, ¶ 10, at 3, and ¶ 14, at 4. The Examiner also rejected these claims as anticipated by Rennie, arguing that the "central core rod" (12) is a mounting cup. See 7/7/04 OA, ¶ 11, at 3; Rennie, at Col. 2:37-38. The core rod (12) of Rennie is described as "a hollow or tubular element" (id.) and the figures are consistent with this description. Thus, Rennie rod is not a "cup" as claimed here. The Examiner went on to reject claim 20 as being obvious over Rennie, arguing that it would have been obvious "to make the mounting cup out of foamed material since the choice of material is an obvious selection". See 7/7/04 OA, ¶ 12, at 4. However, claim 20 does not state that the mounting cup is made out of foamed material; rather, it adds the element of a "foam insert" within the mounting cup. Rennie neither discloses nor suggests filling its rod with a foam insert and, therefore, does not render the claim obvious.

CONCLUSION

In view of the amendments and arguments set forth above, Applicant respectfully submits that the pending claims are in a condition for allowance.

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